

CA1
EA 81
-84C12

GOVT

International
Development Agency

Agence canadienne de
développement international

CIDA

Government
Publications

Government
Publications

3

Canadian Environment and Natural Resource Assistance



Canadian International
Development Agency

Agence canadienne de
développement international

CAI
EA 81
84C12

CIDA

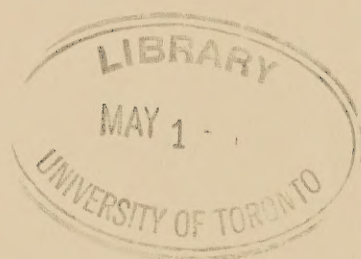
Government
Publications

Government
Publications

3

Canadian Environment and Natural Resource Assistance

Canada



Contents

	Page
Summary.....	1
I. Definition of environment and natural resource activities.....	2
II. CIDA environment and natural resource assistance.....	3
A. Bilateral.....	3
B. Multilateral.....	6
1. UN agencies and international organizations.....	6
2. International financial institutions.....	7
C. Special Programs.....	8
III. Other Canadian environment and natural resource assistance.....	10
Tables	
1. Environment and natural resource projects, by region.....	3
2. Environment and natural resource projects, by type.....	4
3. UNDP-approved projects with significant environmental components....	6
4. CFTC environment and natural resource projects, by type and region..	7
5. IDB environment and natural resource projects, by type.....	8
6. NGO and ICDS disbursements to environment and natural resource projects.....	9
7. IDRC environment and natural resource projects, by type.....	10
8. IDA environment and natural resource projects, by type and region...	10
Graph: Environment and natural resource commitments over time.....	5
Footnotes.....	12
Appendix: Categories of environment and natural resource assistance.....	13



Digitized by the Internet Archive
in 2022 with funding from
University of Toronto

<https://archive.org/details/31761115525305>

Summary

This paper provides a preliminary review of Canada's Official Development Assistance (ODA) to programs or projects intended to enhance or protect the human and natural environment. Environment and natural resource assistance is defined as environmental institution building; forestry, fishing and water resource identification and management; drinking water, sanitation and disease control; human settlements; soil, plant and animal protection; and pollution reduction. Because of certain difficulties in identifying projects which fit into this definition, the figures cited should be treated with caution. They do, however, provide a picture of the range of Canada's environmental assistance activity.

An analysis of Canadian International Development Agency (CIDA) bilateral assistance for 1982-83 shows that a substantial proportion -- about 12 per cent -- was committed to environment and natural resource projects. The objectives of over half of these projects were either to improve the quality or increase the quantity of water for agricultural and domestic use, or to provide adequate sanitation. Forestry management and development projects were also a relatively large component. Within the four regions, the importance of environmental factors varies -- in the Americas and Anglophone Africa, drinking water and sanitation projects were predominant; in Francophone Africa, forestry projects were emphasized; while in Asia the majority of commitments were to agricultural water projects.

The Agency also provided funds to a number of Canadian and international organizations which are active in the environment and natural resource field, often in areas which do not receive much bilateral funding -- such as housing or pollution reduction. To round out the ODA picture, almost one-fifth of the total amount of International Development Research Centre (IDRC) project approvals in 1981-82 could be considered to be for environmental research activities, as could one-fifth of the total value of projects approved by the International Development Association (IDA) of the World Bank (funded by the Department of Finance). In addition, the Department of External Affairs supports the UN Environment Program and other programs contributing to the global management of resources.

I. Definition of environment and natural resource activities

The phrase "environment and natural resource projects" as used in this paper refers to projects intended to protect or enhance the human or natural environment. This definition therefore covers assistance to help developing countries build up their environmental institutions (includes development of government policy, legislation or regulation, and public or private training and information); assistance in identifying natural resources through mapping, surveying, etc.; assistance in the management of certain resources such as fishery, forestry, soil, plant, wildlife and water resources; and assistance to improve the human environment through disease control, pollution control and the provision of housing, drinking water or sanitation.

For the purpose of simplification, certain projects have been omitted from this definition. The agricultural sector has been excluded except in relation to soil and plant conservation or agricultural water control. Fossil and mineral resources are also excluded, and the energy sector is considered only in relation to fuelwood.

In all cases, projects have been selected on the basis of their potential to contribute positively to the environment. Until evaluations are done on each project, however, there is no guarantee that positive results have actually been achieved, nor that in developing one aspect of the environment, another aspect has not been affected negatively. For example, a project to develop water resources through irrigation may lead to soil salinization, alkalization and waterlogging, or to an increased incidence of disease.

An effort was also made to distinguish between natural resource management and exploitation. Thus such projects as the provision of sawmilling equipment or boats for small fishermen were excluded from the forestry and fishery resource categories. Similarly, hydroelectric dam projects were excluded from the agricultural water category, unless they also included components for flood control and irrigation. The distinction between management and exploitation, however, is not always clear, and in some cases there is an overlap. The data related to natural resource projects should therefore be treated with some caution.

Multi-sector projects, such as integrated rural development projects, were not included because it was not possible to separate the environmental from other components. Also, technical assistance to environmental activities is probably under-reported because details were not always readily available.

II. CIDA environment and natural resource assistance

A. Bilateral

The total amount committed to environment and natural resource activities in 1982-83 was about \$72 million, or 12 per cent of bilateral ODA. The largest proportion of these projects was in Asia, the lowest in the Americas. This is roughly consistent with the proportion of CIDA bilateral ODA to Asia and the Americas -- 40 and 14 per cent respectively. Francophone Africa had a stronger commitment to the environment than other regions -- environment and natural resource projects representing 16.7 per cent of bilateral ODA to the region. The Americas had a weaker commitment to the environment, while Asia and Anglophone Africa were near the average.

Table 1 Environment and natural resource projects,
by region (1982-83 commitments)¹

Region	Amount (\$ thousand)	Share of total environment and natural resource ODA*	Share of total bilateral ODA in region
Americas	7,594	10.5%	9.0%
Francophone Africa	23,210	32.1%	15.5%
Anglophone Africa	15,342	21.2%	10.1%
Asia	26,111	36.1%	12.1%
Total	72,257	100.0%	12.0%

* Percentage shares throughout have been rounded off.

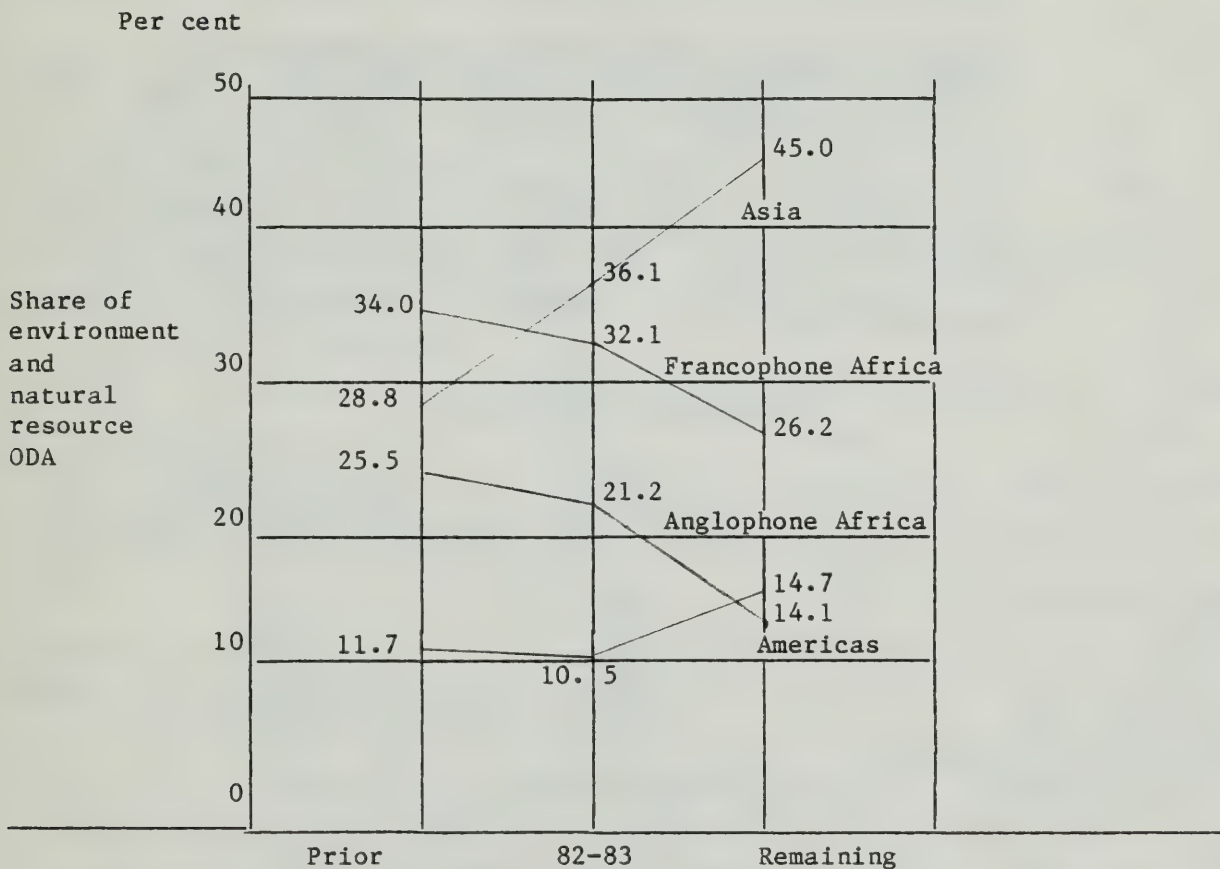
Most of the bilateral environmental activity took place in the drinking water and sanitation and agricultural water sub-sectors. Forestry and resource identification projects were also substantial components. Within the four regions, the importance of various sub-sectors varied. In the Americas and Anglophone Africa, drinking water and sanitation projects were predominant; in Francophone Africa, forestry projects were emphasized; and in Asia, the majority of commitments went to agricultural water projects.

Table 2 Environment and natural resource projects,
by type (1982-83 commitments)²

Project type	Americas	Francophone Africa	Anglophone Africa	Asia	Total (for all regions)
Environmental institution building	0.01%	2.2%	0.5%	1.1%	1.2%
Drinking water and sanitation	60.6%	3.8%	74.7%	1.7%	24.1%
Resource identification	9.5%	3.4%	13.6%	13.6%	9.9%
Forestry	23.0%	41.0%	2.5%	5.3%	18.0%
Fisheries		14.1%		1.5%	5.1%
Conservation and land management	1.6%	9.7%	2.4%		3.8%
Human settlements	0.2%	7.2%	6.2%	3.8%	5.0%
Agricultural water	3.0%	18.2%		64.9%	29.6%
Disease control	2.0%	0.6%		8.1%	3.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Predictions about CIDA's future performance in the environment sector are difficult to make because future commitments are very tentative and time frames are not clear. One can, however, get a sketchy view of how the various regions will perform in relation to each other. On the basis of reported future commitments, the Asia and Americas share of environment and natural resource activity should increase, while that of the Africas should decrease.

Graph: Environment and natural resource commitments over time³



B. Multilateral

1. UN agencies and international organizations

Almost \$3 million of CIDA's 1982-83 multilateral funding was for international programs which could be considered entirely environmentally related:

International Board for Plant Genetic Research	\$ 225,000
International Council for Research in Agro-forestry	300,000
Tropical Disease Research Program	1,000,000
Diarrheal Disease Control Program	250,000
Onchocerciasis Control Program	1,000,000
Total	2,775,000

Most of the rest of CIDA's multilateral funding goes to the United Nations Development Program (UNDP, \$49 million), the Commonwealth Fund for Technical Co-operation (CFTC, \$12 million) and UNICEF (\$11 million). These organizations are all involved in environmental activities. The UNDP approved 146 projects with significant environmental components worth \$94 million in 1982-83, and is providing over \$133 million in support of drinking water and sanitation projects together with the UN Capital Development Fund and the UN Sudano-Sahelian Office.

Table 3 UNDP-approved projects with significant environmental components (June 1982-83)

Type of project	Cost (\$ million)	Share of total environmental cost
Land and water	38.3	41.0%
Crops	16.6	17.8%
Forestry	13.4	14.3%
Fisheries	6.5	7.0%
Agrometeorology	7.9	8.4%
Environmental sanitation	4.2	4.5%
Human settlements	6.6	7.1%
Total	93.5	100.0%

Source: Report on the Activities of UNDP in the implementation of the Declaration of Environmental Policies and Procedures Relating to Economic Development, June 1983.

Water supply and sanitation are major concerns for UNICEF, accounting for 20 per cent of total 1982-83 program commitments. A large part of the assistance to this sub-sector was for East Asia and Pakistan (70%) and Africa (16%). In addition, UNICEF funds a number of projects which include disease control as a component. About 6 per cent of technical assistance funding by the CFTC in 1981-82 could be considered environmental. Of this amount, a majority was for the resource identification and fisheries sub-sectors. Regionally, the Americas received the most environmental funding, followed by Africa and then Asia.

Table 4 CFTC environment and natural resource projects,
by type and region (July 1981-June 1982)⁴

Type of project	Share of total	Region	Share of total
Resource identification	33.3%	Americas	34.4%
Drinking water and sanitation	15.0%		
Forestry	2.9%	Africa	32.5%
Fisheries	26.9%		
Agricultural water	11.9%	Asia	22.5%
Human settlements	6.1%		
Industrial pollution	1.9%	Other*	10.6%
Conservation and land management	1.9%		
Total	100.0%	Total	100.0%

* Refers to Mediterranean countries and multinational projects.

Source: Review of CFTC Activities 1981-82.

2. International financial institutions

The regional development banks which receive CIDA funds are members of a Committee of International Development Institutions for the Environment (CIDIE) and are signatories to a declaration of environmental policies and procedures relating to economic development. As such they are committed to providing technical assistance on environmental matters to developing countries, and to considering support for project proposals specifically designed to protect, manage or enhance

the human and natural resource environment. The Asian Development Bank is expected to increase its funding to solid waste, air and water pollution projects as industrialization and urbanization in that region grows. The Caribbean Development Bank has emphasized housing, water supplies and sanitation for its future environmental assistance.

An analysis of the 1982 loan approvals of the Inter-American Development Bank (IDB) indicates a similar emphasis on housing, drinking water and sanitation. Overall, environmental projects accounted for almost 17 per cent of IDB loans. CIDA funding to the IDB in 1981-82 totalled \$26.65 million.

Table 5 IDB environment and natural resource projects,
by type (1982)⁵

Type of project	Amount (\$ thousand)	Share of Total
Human settlements	271,330	58.1%
Drinking water and sanitation	183,751	39.4%
Fisheries	10,060	2.1%
Agricultural water	1,153	0.2%
<hr/>		
Total	446,294	100.0%

Source: IADB Annual Report 1982, description of projects, pages 41-98.

C. Special programs

The Non-Governmental Organizations (NGO) Division of CIDA funded about 239 projects with environment and natural resource components in 1982-83, with total disbursements of over \$3 million. This represents about 12 per cent of the Division's total disbursements. Most of the projects were in the drinking water and sanitation and agricultural water sub-sectors. Human settlements and disease control projects received relatively more funding through the NGO Division than through the bilateral divisions.

Thirty-nine environment and natural resource projects were funded through the Institutional Cooperation and Development Services (ICDS) Division in 1982-83, with disbursements amounting to over \$1 million, or 3 per cent of total ICDS disbursements. As with the NGO Division, drinking water and sanitation and human settlement projects represented important components of this assistance. Fisheries and resource identification projects also received a substantial proportion of the funds.

Table 6 NGO and ICDS disbursements to environment and natural resource projects (1982-83)⁶

Type of project	NGO Disbursements		ICDS disbursements	
	Amount (\$ thousand)	Share	Amount (\$ thousand)	Share
Drinking water and sanitation	1,248	40.6%	464	44.2%
Agricultural water	946	30.7%		
Human settlements	639	20.7%	159	15.1%
Disease control	221	7.2%	2	0.2%
Conservation and land management	20	0.6%	2	0.2%
Forestry	4	0.1%	6	0.5%
Environmental institution building			74	7.0%
Resource identification			189	18.0%
Fisheries			152	14.5%
Industrial pollution			3	0.3%
Total	3,078	100.0%	1,051	100.0%

The major international non-governmental organizations working in the environment field are the International Union for the Conservation of Nature (IUCN), the International Institute for Environment and Development (IIED), and the Environment Liaison Centre (ELC). In 1981-82, the International Non-Governmental Organization (INGO) Division of CIDA gave \$50,000 to the IUCN, \$210,000 to the IIED, and \$104,000 to the ELC. Various other international organizations dealing with human settlements, geology, oceans, and biology were also funded. The total amount received by all environment and natural resource organizations was \$1 million, or 8 per cent of INGO disbursements.

III. Other Canadian environment and natural resource assistance

In 1981-82, the International Development Research Centre (IDRC) approved almost \$6.5 million for environment and natural resource projects lasting one to three years. This sum represents about 18 per cent of the total project approvals in that year. Forestry, fisheries and disease control research were predominant.

Table 7 IDRC environment and natural resource projects,
by type (1981-82)⁷

Type of project	Amount (\$ thousand)	Share
Fisheries	1,885	29.3%
Forestry	1,619	25.2%
Disease control	1,448	22.5%
Resource identification	631	9.8%
Drinking water and sanitation	367	5.7%
Human settlements	357	5.5%
Industrial pollution	79	1.2%
Environmental institution building	38	0.5%
Total	6,424	100.0%

Source: IDRC Annual Report 1981-82, pages 15-27.

Contributions, through the Department of Finance, to the International Development Association of the World Bank totalled \$164.6 million in 1981-82. Of the projects approved by IDA in that period, 21 per cent could be considered to be environmental, for a total value of U.S. \$551 million. Most of the loans were for agricultural water projects in Asia.

Table 8 IDA environment and natural resource projects,
by type and region (1981-82)⁸

Type of project	Share	Region	Share
Agricultural water	73.8%	Asia	86.3%
Forestry	12.9%	Anglophone	
		Africa	11.0%
Human settlements	9.0%	Francophone	
		Africa	1.8%
Drinking water and sanitation	4.1%	Americas	0.7%
Total	100.0%	Total	100.0%

The agency coordinating environmental matters within the United Nations is the UN Environment Program (UNEP). Support for the Voluntary Fund of the UNEP comes from the Department of External Affairs; funding totalled nearly \$1 million in 1981-82. External Affairs also supports the UN Educational, Scientific and Cultural Organization (UNESCO) which operates the Man and the Biosphere Program and the International Hydrological Program. These activities have as objectives the establishment of a scientific basis for rational management of natural resources on a regional and global scale.

Footnotes

1. The tables and graph on CIDA's bilateral ODA to environment and natural resource assistance are taken from a compilation of projects listed in the Third Quarterly Project Status Report for 1982-83.
2. For a more complete definition of the different types of environment and natural resource assistance, see the Appendix.
3. "Prior" refers to amounts paid out to the projects up to 1982-83. "82-83" refers to the commitment for the 1982-83 fiscal year. "Remaining" refers to the amount of CIDA commitment to the projects which remains to be disbursed. The total amount of prior disbursements was \$300,332,000; of 1982-83 commitments, \$72,257,000; and of remaining commitments, \$671,148,000.
4. The summary of CFTC activity is based on CIDA's definition of environment and natural resource activity and was compiled on the basis of project titles in the Review of CFTC Activities 1981-82.
5. The summary of IADB activity is also based on the CIDA definition of environment and natural resource assistance, and was compiled on the basis of the project descriptions in the IDB Annual Report 1982.
6. This table is based on the computer summary of NGO and ICDS projects, by title and sector, for fiscal year 1982-83.
7. This summary of IDRC loan approvals is based on the CIDA definition of environment and natural resource assistance and was compiled from loan descriptions in the IDRC Annual Report 1981-82.
8. This summary is also based on the CIDA definition and is based on project loan descriptions in the World Bank Annual Report 1982. Total IDA loan approvals in that year were U.S. \$2,686.3 million.

Appendix

Categories of environment and natural resource assistance

Natural environment

1. Environmental institution building

Any activity which builds host country awareness and capability to deal with environmental questions. For example:

- . resource management planning
- . environmental policy and legislation
- . information and education
- . environmental training

2. Resource identification

Any activity which builds up natural resource inventories or survey and interpretive capability, except where such activity is clearly linked with the development of one specific resource (i.e. forestry, water), in which case it is included in the list of projects for that resource. For example:

- . aerial mapping
- . remote sensing
- . river basin resource studies
- . topographical mapping and registry
- . geological surveying

3. Forestry

Any activity which provides for the surveying, management and development of forest resources, (excluding projects to supply forestry equipment). For example:

- . forestry advisory services
- . forestry inventory
- . wood charcoal study
- . forestry education and training
- . forest fire protection
- . tree seed centres

4. Fisheries

Any activity which provides for the surveying, management and development of fisheries (excluding projects to supply the small fisherman). For example:

- . fisheries development planning
- . fisheries advice
- . fisheries survey

5. Conservation and land management

Any activity which protects the fertility of land and the diversity of plant and animal life (excluding fisheries and forestry). For example:

- . soil conservation
- . wildlife management and protection
- . national park development
- . plant protection
- . range or grasslands improvement

6. Agricultural water

Any activity which increases the quantity, protects the quality, or results in improved usage of water for agricultural purposes, and any water resource management project in general. For example:

- . irrigation
- . livestock watering facilities
- . flood control
- . water management or regulation
- . improved drainage

Human Environment

7. Human Settlements

Any activity which provides for the enhancement of the human environment through the provision of sites and services. For example:

- . urban planning
- . social infrastructure
- . national housing policy counselling
- . resettlement

8. Drinking water and sanitation

Any activity which improves the quantity or quality of drinking water or improves the quality of or limits discharge to acceptable levels. For example:

- . drinking water supply (water plants, handpumps, boreholes, village wells, exploratory drilling for groundwater)
- . drinking water quality
- . water program evaluation
- . community infrastructure
- . sewerage treatment

9. Disease control

Any activity directed at the control and elimination of disease vectors (excluding maternal and child care or other general health services); also any activity directed towards controlling occupational health hazards. For example:

- . vaccine production equipment supplies program
- . immunization programs; equipment; supplies
- . lung disease related to occupation
- . diarrhoeal diseases

10. Industrial pollution

Any activity directed towards the reduction of pollutants emitted by industry. For example:

- . aquatic pollution control
- . air pollution control
- . noise pollution control
- . standards, testing, legislation

Version française disponible sur demande

March 1984

Produced by the Public Affairs Branch

Canadian International Development Agency (CIDA)

Hull, Quebec

K1A 0G4

Tel: (819) 997-6100



3 1761 11552530 5